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*** YOU HAVE NEW MAIL ***

=> s oligonucleotide? (6a) positiv? (5a) phosph?
L1          49 OLIGONUCLEOTIDE? (6A) POSITIV? (5A) PHOSPH?

=> dup rem l1
PROCESSING COMPLETED FOR L1
L2          45 DUP REM L1 (4 DUPLICATES REMOVED)

=> d l2 bib abs 1-45

L2   ANSWER 1 OF 45  WPIDS (C) 2003 THOMSON DERWENT
AN   2003-221573 [21]   WPIDS
DNC  C2003-056344
TI   Salt complex useful for oligonucleotide synthesis comprises an organic
     base and a 1,1-dioxo-1,2-dihydro-1-lambda-6-benzo(d)isothiazol-3-one.
DC   B02
IN   MIRANDA, G K; SINHA, N; ZEDALIS, W E
PA   (AVEC-N) AVECIA BIOTECHNOLOGY INC; (AVEC-N) AVECIA LTD
CYC  100
PI   WO 2003004512 A1 20030116 (200321)* EN   22p
        RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR IE IT KE LS LU
            MC MW MZ NL OA PT SD SE SK SL SZ TR TZ UG ZM ZW
         W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
            DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
            KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT
            RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM
            ZW
ADT  WO 2003004512 A1 WO 2002-GB3029 20020701
PRAI US 2001-302717P  20010703
AN   2003-221573 [21]   WPIDS
AB   WO2003004512 A UPAB: 20030328
     NOVELTY - A salt complex (Q) comprises an organic base and a
     1,1-dioxo-1,2-dihydro-1 lambda -6-benzo(d)isothiazol-3-one (I).
          DETAILED DESCRIPTION - A salt complex (Q) comprises an organic base
     and a 1,1-dioxo-1,2-dihydro-1 lambda -6-benzo(d)isothiazol-3-one of
```

formula (I).
p = 0 - 4;
X7 = O or S;
R = heterocyclyl, (optionally substituted), R13, halo, -NR11R12, -OR13, -OC(O)R13, -C(O)OR13, cyano, -CHO, -COR13, -NHCOR13, or SR13;
CR+R = optionally saturated a six membered ring;
R11, R12 = -H or R13;
NR11+R12 = heterocyclyl; and
R13 = aliphatic group, aryl or aralkyl (all optionally substituted).
INDEPENDENT CLAIMS are included for the following:
(1) an activator (A1) solution comprising an aprotic organic solvent, an organic base and (I);
(2) synthesis (S1) of an oligonucleotide using phosphoramidite chemistry involving coupling a nucleoside or a nascent oligonucleotide having a free hydroxy or thiol group (preferably a free 5'-hydroxy group) and a nucleoside phosphoramidite (a) (preferably a nucleoside 3'-phosphoramidite) in the presence of (I) or an activator comprising a mixture of (I) and an N-alkylimidazole (preferably N-methylimidazole);
(3) condensation (B1) of an N-mer oligonucleotide or a nucleoside of formula (II) with the nucleoside phosphoramidite of formula (Ia) involving contacting (II) with (Ia) and (I) to form an oligonucleotide having 5'-trivalent phosphorus linkage of formula (III); and
(4) preparation (C1) of (Q) involving contacting (I) with an organic base.
X1, X4 = -O- or -S-;
X2 = -O-, -S- or NR14;
X3 = -O-, -S-, -CH2-, or -(CH2)2-;
X5 = OH or SH;
R1 = alcohol or thio protecting group;
R2 = -H, optionally substituted aliphatic group, -F -OR6, -NR7R8, or-SR9;
R3 = -OCH2CH2CN, -SCH2CH2CN, optionally substituted aliphatic group, -OR10, -SR10, -O-CH2CH2-Si(CH3)2C6H5, -OCH2CH2-S(O)2-CH2CH3, -O-CH2CH2C6H4-NO2, -S-CH2CH2-Si(CH3)2C6H5, -S-CH2CH2S(O)2-CH2CH3, or -S-CH2CH2-C6H4-NO2;
R4, R5, R10 = R13;
NR4+R5, NR7+R8 and NR18+R19 = heterocyclyl;
R6 = H, R13 or -(CH2)q-NR18R19;
R7, R8 = H, optionally substituted aliphatic group or an amine protecting group;
R9 = H, optionally substituted aliphatic group, or a thio protecting group;
R14 = -H, alkyl, aryl or aralkyl;
R16 = hydroxy, thio or amino protecting group, -(CH2)q-NR18R19, a solid support, or a cleavable linker attached to a solid support;
R18 and R19 = heteroaryl or heteroalkyl (both optionally substituted), H, R13 or amine protecting group;
q = 1 - 6;
B' = H, natural or unnatural nucleobase, protected natural or unnatural nucleobase or a optionally protected heterocycle; and
n = 0 or positive number.
USE - As activators in the oligonucleotide synthesis (claimed).
ADVANTAGE - (I) in the presence of an organic base promotes phosphoramidite condensation reaction with at least equal efficiency as tetrazole with fewer side products. The complex is non-explosive, therefore safer to use than tetrazole, particularly in large-scale synthesis of oligonucleotide.
Dwg.0/0

L2 ANSWER 2 OF 45 USPATFULL
AN 2003:106233 USPATFULL
TI Compositions and methods for the therapy and diagnosis of pancreatic

09567863

cancer
IN Benson, Darin R., Seattle, WA, UNITED STATES
Kalos, Michael D., Seattle, WA, UNITED STATES
Lodes, Michael J., Seattle, WA, UNITED STATES
Persing, David H., Redmond, WA, UNITED STATES
Hepler, William T., Seattle, WA, UNITED STATES
Jiang, Yuqiu, Kent, WA, UNITED STATES
PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)
PI US 2003073144 A1 20030417
AI US 2002-60036 A1 20020130 (10)
PRAI US 2001-333626P 20011127 (60)
US 2001-305484P 20010712 (60)
US 2001-265305P 20010130 (60)
US 2001-267568P 20010209 (60)
US 2001-313999P 20010820 (60)
US 2001-291631P 20010516 (60)
US 2001-287112P 20010428 (60)
US 2001-278651P 20010321 (60)
US 2001-265682P 20010131 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
CLMN Number of Claims: 17
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 14253
AB Compositions and methods for the therapy and diagnosis of cancer, particularly pancreatic cancer, are disclosed. Illustrative compositions comprise one or more pancreatic tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly pancreatic cancer.

L2 ANSWER 3 OF 45 USPATFULL
AN 2003:105883 USPATFULL
TI Encapsulation of plasmid DNA (lipogenes.TM.) and therapeutic agents with nuclear localization signal/fusogenic peptide conjugates into targeted liposome complexes
IN Boulikas, Teni, Mountain View, CA, UNITED STATES
PI US 2003072794 A1 20030417
AI US 2001-876904 A1 20010608 (9)
PRAI US 2000-210925P 20000609 (60)
DT Utility
FS APPLICATION
LREP Antoinette F. Konski, Baker & McKenzie, 660 Hansen Way, Palo Alto, CA, 94304
CLMN Number of Claims: 42
ECL Exemplary Claim: 1
DRWN 8 Drawing Page(s)
LN.CNT 4201
AB A method is disclosed for encapsulating plasmids, oligonucleotides or negatively-charged drugs into liposomes having a different lipid composition between their inner and outer membrane bilayers and able to reach primary tumors and their metastases after intravenous injection to animals and humans. The formulation method includes complex formation between DNA with cationic lipid molecules and fusogenic/NLS peptide conjugates composed of a hydrophobic chain of about 10-20 amino acids and also containing four or more histidine residues or NLS at their one

end. The encapsulated molecules display therapeutic efficacy in eradicating a variety of solid human tumors including but not limited to breast carcinoma and prostate carcinoma. Combination of the plasmids, oligonucleotides or negatively-charged drugs with other anti-neoplastic drugs (the positively-charged cis-platin, doxorubicin) encapsulated into liposomes are of therapeutic value. Also of therapeutic value in cancer eradication are combinations of encapsulated the plasmids, oligonucleotides or negatively-charged drugs with HSV-tk plus encapsulated ganciclovir.

L2 ANSWER 4 OF 45 USPATFULL
AN 2003:95955 USPATFULL
TI Method and reagent for treatment of diseases by expression of the c-Myc gene
IN Thompson, James D., Boulder, CO, United States
Draper, Kenneth G., Boulder, CO, United States
PA Ribozyme Pharmaceuticals, Inc., Boulder, CO, United States (U.S. corporation)
PI US 6544755 B1 20030408
AI US 1994-192943 19940207 (8)
RLI Continuation of Ser. No. US 1992-936422, filed on 26 Aug 1992
DT Utility
FS GRANTED
EXNAM Primary Examiner: McGarry, Sean
LREP McDonnell Boehnen Hulbert & Berghoff
CLMN Number of Claims: 8
ECL Exemplary Claim: 1
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 1229
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An enzymatic RNA molecule which cleaves mRNA associated with development or maintenance of Burkitt's lymphoma or acute lymphocytic leukemia.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 5 OF 45 USPATFULL
AN 2002:272801 USPATFULL
TI Compositions and methods for the therapy and diagnosis of colon cancer
IN Stolk, John A., Bothell, WA, UNITED STATES
Xu, Jiangchun, Bellevue, WA, UNITED STATES
Chenault, Ruth A., Seattle, WA, UNITED STATES
Meagher, Madeleine Joy, Seattle, WA, UNITED STATES
PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)
PI US 2002150922 A1 20021017
AI US 2001-998598 A1 20011116 (9)
PRAI US 2001-304037P 20010710 (60)
US 2001-279670P 20010328 (60)
US 2001-267011P 20010206 (60)
US 2000-252222P 20001120 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
CLMN Number of Claims: 17
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 9233
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compositions and methods for the therapy and diagnosis of cancer, particularly colon cancer, are disclosed. Illustrative compositions comprise one or more colon tumor polypeptides, immunogenic portions

thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly colon cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 6 OF 45 USPATFULL
AN 2002:243051 USPATFULL
TI Compositions and methods for the therapy and diagnosis of ovarian cancer
IN Algate, Paul A., Issaquah, WA, UNITED STATES
Jones, Robert, Seattle, WA, UNITED STATES
Harlocker, Susan L., Seattle, WA, UNITED STATES
PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)
PI US 2002132237 A1 20020919
AI US 2001-867701 A1 20010529 (9)
PRAI US 2000-207484P 20000526 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
CLMN Number of Claims: 11
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 25718
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compositions and methods for the therapy and diagnosis of cancer, particularly ovarian cancer, are disclosed. Illustrative compositions comprise one or more ovarian tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly ovarian cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 7 OF 45 USPATFULL
AN 2002:242791 USPATFULL
TI Compositions and methods for the therapy and diagnosis of colon cancer
IN King, Gordon E., Shoreline, WA, UNITED STATES
Meagher, Madeleine Joy, Seattle, WA, UNITED STATES
Xu, Jiangchun, Bellevue, WA, UNITED STATES
Secrist, Heather, Seattle, WA, UNITED STATES
PA Corixa Corporation, Seattle, WA, UNITED STATES (U.S. corporation)
PI US 2002131971 A1 20020919
AI US 2001-33528 A1 20011226 (10)
RLI Continuation-in-part of Ser. No. US 2001-920300, filed on 31 Jul 2001, PENDING
PRAI US 2001-302051P 20010629 (60)
US 2001-279763P 20010328 (60)
US 2000-223283P 20000803 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
CLMN Number of Claims: 17
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 8083
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

09567863

AB Compositions and methods for the therapy and diagnosis of cancer, particularly colon cancer, are disclosed. Illustrative compositions comprise one or more colon tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly colon cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 8 OF 45 USPATFULL
AN 2002:236261 USPATFULL
TI Charge tags and the separation of nucleic acid molecules
IN Lyamichev, Victor, Madison, WI, UNITED STATES
Skrzpczynski, Zbigniew, Verona, WI, UNITED STATES
Allawi, Hatim T., Madison, WI, UNITED STATES
Wayland, Sarah R., Madison, WI, UNITED STATES
Takova, Tsetska, Madison, WI, UNITED STATES
Neri, Bruce P., Madison, WI, UNITED STATES
PA Third Wave Technologies, Inc. (U.S. corporation)
PI US 2002128465 A1 20020912
AI US 2001-777430 A1 20010206 (9)
RLI Continuation-in-part of Ser. No. US 1999-333145, filed on 14 Jun 1999, PENDING Continuation-in-part of Ser. No. US 1996-682853, filed on 12 Jul 1996, GRANTED, Pat. No. US 6001567
DT Utility
FS APPLICATION
LREP MEDLEN & CARROLL, LLP, 101 HOWARD STREET, SUITE 350, SAN FRANCISCO, CA, 94105
CLMN Number of Claims: 86
ECL Exemplary Claim: 1
DRWN 46 Drawing Page(s)
LN.CNT 5163
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to novel phosphoramidites, including positive and neutrally charged compounds. The present invention also provides charge tags for attachment to materials including solid supports and nucleic acids, wherein the charge tags increase or decrease the net charge of the material. The present invention further provides methods for separating and characterizing molecules based on the charge differentials between modified and unmodified materials.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 9 OF 45 USPATFULL
AN 2002:326113 USPATFULL
TI Method and reagent for treatment of lung cancer and other malignancies caused by the deregulation of L-MYC gene expression
IN Thompson, James D., Boulder, CO, United States
Draper, Kenneth G., Boulder, CO, United States
PA Ribozyme Pharmaceuticals, Inc., Boulder, CO, United States (U.S. corporation)
PI US 6492512 B1 20021210
AI US 1992-936532 19920826 (7)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Wang, Andrew; Assistant Examiner: Lacourciere, Karen A
LREP McDonnell Boehnen Hulbert & Berghoff
CLMN Number of Claims: 15
ECL Exemplary Claim: 1
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)

09567863

LN.CNT 1028
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An enzymatic RNA molecule which cleaves mRNA associated with development or maintenance of lung cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 10 OF 45 USPATFULL
AN 2002:217070 USPATFULL
TI Method and reagent for inhibiting herpes simplex virus replication
IN Draper, Kenneth G., Boulder, CO, United States
PA Ribozyme Pharmaceuticals, Inc., Boulder, CO, United States (U.S. corporation)
PI US 6440719 B1 20020827
AI US 2000-634262 20000808 (9)
RLI Continuation of Ser. No. US 1999-340861, filed on 28 Jun 1999 Continuation of Ser. No. US 1997-835269, filed on 8 Apr 1997, now patented, Pat. No. US 5972699 Continuation of Ser. No. US 1996-623891, filed on 25 Mar 1996, now patented, Pat. No. US 5795778 Continuation of Ser. No. US 1994-238200, filed on 4 May 1994, now abandoned Continuation of Ser. No. US 1992-987133, filed on 7 Dec 1992, now abandoned Continuation-in-part of Ser. No. US 1992-948359, filed on 18 Sep 1992, now abandoned Continuation-in-part of Ser. No. US 1992-882921, filed on 14 May 1992, now abandoned
DT Utility
FS GRANTED
EXNAM Primary Examiner: Patterson, Jr., Charles L.
LREP McDonnell Boehnen Hulbert & Berghoff
CLMN Number of Claims: 11
ECL Exemplary Claim: 1
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 2087
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An enzymatic RNA molecule which specifically cleaves a herpes simplex virus mRNA molecule.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 11 OF 45 USPATFULL
AN 2002:201899 USPATFULL
TI Method and reagent for inhibiting herpes simplex virus replication
IN Draper, Kenneth G., Boulder, CO, United States
PA Ribozyme Pharmaceuticals, Inc., Boulder, CO, United States (U.S. corporation)
PI US 6432704 B1 20020813
AI US 1999-340861 19990628 (9)
RLI Continuation of Ser. No. US 1997-835269, filed on 8 Apr 1997, now patented, Pat. No. US 5972699 Continuation of Ser. No. US 1996-623891, filed on 25 Mar 1996, now patented, Pat. No. US 5795778 Continuation of Ser. No. US 1994-238200, filed on 4 May 1994, now abandoned Continuation of Ser. No. US 1992-987133, filed on 7 Dec 1992, now abandoned Continuation-in-part of Ser. No. US 1992-948359, filed on 18 Sep 1992, now abandoned Continuation-in-part of Ser. No. US 1992-882921, filed on 14 May 1992, now abandoned
DT Utility
FS GRANTED
EXNAM Primary Examiner: Patterson, Jr., Charles L.
LREP McDonnell Boehnen Hulbert & Berghoff
CLMN Number of Claims: 11
ECL Exemplary Claim: 1
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 2199

09567863

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An enzymatic RNA molecule which specifically cleaves a herpes simplex virus mRNA molecule.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 12 OF 45 USPATFULL
AN 2002:57944 USPATFULL
TI Antisense inhibition of ras gene with chimeric and alternating oligonucleotides
IN Ecker, David J., Leucadia, CA, United States
Cook, Phillip Dan, Escondido, CA, United States
Monia, Brett P., La Costa, CA, United States
Freier, Susan M., San Diego, CA, United States
Sanghvi, Yogesh S., Encinitas, CA, United States
PA ISIS Pharmaceuticals, Inc., Carlsbad, CA, United States (U.S. corporation)
PI US 6359124 B1 20020319
AI US 1999-248386 19990212 (9)
RLI Division of Ser. No. US 1997-848840, filed on 30 Apr 1997, now patented, Pat. No. US 5965722 Continuation-in-part of Ser. No. US 1989-411734, filed on 25 Sep 1989, now patented, Pat. No. US 4945741
DT Utility
FS GRANTED
EXNAM Primary Examiner: Fredman, Jeffrey; Assistant Examiner: Chakrabarti, Arun
LREP Woodcock Washburn LLP
CLMN Number of Claims: 8
ECL Exemplary Claim: 1
DRWN 24 Drawing Figure(s); 30 Drawing Page(s)
LN.CNT 3066
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compositions and methods are provided for the modulation of expression of the human ras gene in both the normal and activated forms. Oligonucleotides are provided that have methylene(methylimino) linkages alternating with phosphorothioate or phosphodiester linkages. Further oligonucleotides are provide that have a first region having a methylene(methylimino) linkage alternating with a phosphorothioate or phosphodiester linkage and a second region having phosphorothioate linkages. Such oligonucleotides can be used for diagnostics as well as for research purposes including methods for diagnosis, detection and treatment of conditions arising from the activation of the H-ras gene.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 13 OF 45 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AN 2003:81430 BIOSIS
DN PREV200300081430
TI High sensitive ion-channel sensors for detection of oligonucleotides using PNA modified gold electrodes.
AU Aoki, Hiroshi; Umezawa, Yoshio (1)
CS (1) Japan Science and Technology Corporation (JST), Tokyo, Japan: umezawa@chem.s.u-tokyo.ac.jp Japan
SO Electroanalysis, (November 2002, 2002) Vol. 14, No. 19-20, pp. 1405-1410. print.
ISSN: 1040-0397.
DT Article
LA English
AB The gold electrodes modified with self-assembled monolayers composed of the peptide nucleic acid (PNA) probe and 8-amino-1-octanethiol were used for the detection of a complementary oligonucleotide with a detection limit of 5.1X10-10 M and a relative standard deviation of 1.5% in a pH 7.0

phosphate buffer solution. In contrast, no responses to a non-complementary **oligonucleotide** were observed. The electrode surface was **positively** charged in the **phosphate** buffer solution due to the protonated amine group of the thiol, where the electron transfer reaction between the electroactive marker (Ru(NH3)6)3+ and the electrode was hindered because of the electrostatic repulsion between them. Binding of the complementary oligonucleotide to the PNA probe monolayer cancels the positive charge at the electrode surface, and provides an excess negative charge at the surface, thereby facilitating the access of (Ru(NH3)6)3+ to the electrode surface and its redox reaction. This allows the indirect detection of the complementary oligonucleotide.

L2 ANSWER 14 OF 45 WPIDS (C) 2003 THOMSON DERWENT
AN 2002-075152 [10] WPIDS
CR 2001-007201 [01]; 2003-182493 [18]; 2003-237970 [23]
DNC C2002-022374
TI Multiplexed assay for determining target species in sample by combining sample with eTag reporter conjugated binding compounds for binding the compound with target, releasing eTag reporter, and identifying reporter.
DC A96 B04 D16
IN MATRAY, T; SALINMI-MOOSAVI, H; SINGH, S
PA (ACLA-N) ACLARA BIOSCIENCES INC
CYC 95
PI WO 2001083502 A1 20011108 (200210)* EN 95p
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
AU 2001012402 A 20011112 (200222)
EP 1278760 A1 20030129 (200310) EN
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI
US 6514700 B1 20030204 (200313)
ADT WO 2001083502 A1 WO 2000-US29724 20001027; AU 2001012402 A AU 2001-12402 20001027; EP 1278760 A1 EP 2000-973963 20001027, WO 2000-US29724 20001027; US 6514700 B1 CIP of US 1999-303029 19990430, CIP of US 2000-561579 20000428, US 2000-602586 20000621
FDT AU 2001012402 A Based on WO 200183502; EP 1278760 A1 Based on WO 200183502; US 6514700 B1 CIP of US 6322980
PRAI US 2000-602586 20000621; US 2000-561579 20000428; US 1999-303029 19990430
AN 2002-075152 [10] WPIDS
CR 2001-007201 [01]; 2003-182493 [18]; 2003-237970 [23]
AB WO 200183502 A UPAB: 20030407
NOVELTY - Multiplexed assay (M1) for determining number of target species (TS) in sample using eTag reporter conjugated binding compounds (BC), comprising combining sample with BC under binding conditions, releasing eTag reporters (R) linked to BC by cleavable linkers from bound BC, and identifying released (R), is new. (R) has an individual detection characteristic.

DETAILED DESCRIPTION - Multiplexed assay (M1) for determining number of target species (TS) in sample using eTag reporter conjugated binding compounds (BC), comprising combining sample with BC under binding conditions, releasing eTag reporters (R) linked to BC by cleavable linkers from bound BC, and identifying released (R), is new. (R) has an individual detection characteristic. In M1, (R) is specific for the binding compound to which (R) is conjugated, and is other than oligonucleotides of at least 3 nucleotides. The binding compounds are individually specific for different target species. (R) is released from bound BC by cleavage of the

cleavable linkage and the released (R) is identified by its characteristic for individual detection.

INDEPENDENT CLAIMS are also included for the following:

(1) preparing (M2) a labeled oligonucleotide as member of a family of labeled oligonucleotides each having a different mobility, involves synthesizing an oligonucleotide using an automated synthesizer employing a solid surface, and at the terminus of the synthesized oligonucleotide while bound to the surface sequentially adding at least two of a mass-modifying region. a charge-modifying region and a detectable region, using the automated synthesizer, where two of the regions can be combined in a single region, to produce one member of a family of labeled oligonucleotides; and

(2) a compound (I) comprising an oligonucleotide and in any order a mass-modifying region, a charge-modifying region and a detectable region joined by phosphate linkages.

USE - M1 is useful for determining a number of target species in a sample. M1 is useful for determining the change in the surface membrane protein population for a number of surface membrane proteins. The binding compound consist of at least one ligand for the surface membrane proteins and antibodies to the surface membrane proteins. The combining step includes the addition of second binding compounds conjugated with an active agent producing moiety, where the active agent is singlet oxygen, and causes cleavage of the cleavable linkage. (All claimed). M1 is useful for detecting infectious organisms, e.g. bacteria, and viruses, and for identifying genome.

Dwg.0/9

L2 ANSWER 15 OF 45 USPATFULL
AN 2001:167904 USPATFULL
TI Template-dependent ligation with PNA-DNA chimeric probes
IN Egholm, Michael, Wayland, MA, United States
Chen, Caifu, Brookline, MA, United States
PA Applera Corporation, Foster City, CA, United States (U.S. corporation)
PI US 6297016 B1 20011002
AI US 1999-416003 19991008 (9)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Riley, Jezia
LREP Andrus, Alex
CLMN Number of Claims: 39
ECL Exemplary Claim: 1
DRWN 21 Drawing Figure(s); 19 Drawing Page(s)
LN.CNT 1454
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides methods, kits, and compositions for ligation of PNA-DNA chimeric probes and oligonucleotides when they are hybridized adjacently to template nucleic acids using ligases and ligation reagents. Structural requirements of the chimeras for ligation include 5 to 15 contiguous PNA monomer units, 2 or more contiguous nucleotides, and a 3' hydroxyl or 5' hydroxyl terminus. The chimera and/or oligonucleotide may be labelled with fluorescent dyes or other labels. The methods include, for example, oligonucleotide-ligation assays (OLA) and single nucleotide polymorphism detection.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 16 OF 45 USPATFULL
AN 2001:107670 USPATFULL
TI Method and reagent for inhibiting influenza virus replication
IN Draper, Kenneth G., Solon, OH, United States
PA Ribozyme Pharmaceuticals, Inc., Boulder, CO, United States (U.S. corporation)

09567863

PI US 6258585 B1 20010710
AI US 1994-192946 19940207 (8)
RLI Continuation of Ser. No. US 1992-882713, filed on 14 May 1992
DT Utility
FS GRANTED
EXNAM Primary Examiner: Patterson, Jr., Charles L.
CLMN Number of Claims: 8
ECL Exemplary Claim: 1
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 1188
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An enzymatic RNA molecule which specifically cleaves an influenza virus RNA.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 17 OF 45 USPATFULL
AN 2001:1863 USPATFULL
TI Deoxynucleic alkyl thiourea compounds and uses thereof
IN Bruice, Thomas C., Santa Barbara, CA, United States
Dev, Arya P., Clemson, SC, United States
PA The Regents of the University of California, Oakland, CA, United States (U.S. corporation)
PI US 6169176 B1 20010102
AI US 1999-407675 19990928 (9)
RLI Continuation-in-part of Ser. No. US 1999-347443, filed on 2 Jul 1999
PRAI US 1998-91481P 19980702 (60)
US 1998-111800P 19981211 (60)
DT Utility
FS Granted
EXNAM Primary Examiner: Schwartzman, Robert A.; Assistant Examiner: LaCourciere, Karen A.
LREP Mandel & Adriano
CLMN Number of Claims: 8
ECL Exemplary Claim: 1
DRWN 50 Drawing Figure(s); 31 Drawing Page(s)
LN.CNT 1906
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides novel deoxynucleic alkyl thiourea (dNXt) oligonucleotide compounds for use in antisense or antigene therapy.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 18 OF 45 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 1
AN 2001:251421 BIOSIS
DN PREV200100251421
TI Inactivation of NF-kappaB involved in osteoblast development through interleukin-6.
AU Deyama, Yoshiaki; Takeyama, Sadaaki; Suzuki, Kuniaki (1); Yoshimura, Yoshitaka; Nishikata, Makoto; Matsumoto, Akira
CS (1) Dental Pharmacology, Department of Oral Pathobiological Science, Graduate School of Dental Medicine, Hokkaido University, Sapporo, 060-8586: ksuzuki@den.hokudai.ac.jp Japan
SO Biochemical and Biophysical Research Communications, (April 20, 2001) Vol. 282, No. 5, pp. 1080-1084. print.
ISSN: 0006-291X.
DT Article
LA English
SL English
AB Osteoblasts undergo a process of proliferation and differentiation and are responsible for bone formation. In this study, we examined the relation

between NF-kappaB, a key transcription factor in bone metabolism, and osteoblast maturation. NF-kappaB activity and expression of p50, a subunit of NF-kappaB, decreased during development of osteoblastic MC3T3-E1 cells. The secretion of IL-6 by osteoblast, which in combination with soluble IL-6 receptor induces conversion of fibroblasts to alkaline **phosphatase-positive** cells, also increased. p50 antisense **oligonucleotide** increased IL-6 mRNA expression. These results suggest that p50 regulates transcription of IL-6 and indirectly controls osteoblast maturation.

L2 ANSWER 19 OF 45 WPIDS (C) 2003 THOMSON DERWENT
AN 2000-431595 [37] WPIDS
DNN N2000-322057 DNC C2000-131262
TI Nucleic acids encoding plant CDP (cytosine diphosphate)-alcohol phosphatidyltransferase polypeptide, useful for creating transgenic plants in which the polypeptides are present at higher or lower levels than normal.
DC C06 D16 S03
IN CAHOON, R E; FALCO, S C; KINNEY, A J
PA (DUPO) DU PONT DE NEMOURS & CO E I
CYC 80
PI WO 2000036117 A1 20000622 (200037)* EN 50p
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW
W: AE AL AU BA BB BG BR CA CN CR CU CZ DM EE GD GE HR HU ID IL IN IS JP KP KR LC LK LR LT LV MG MK MN MX NO NZ PL RO SG SI SK SL TR TT UA US UZ VN YU ZA
AU 2000020545 A 20000703 (200046)
ADT WO 2000036117 A1 WO 1999-US29826 19991215; AU 2000020545 A AU 2000-20545 19991215
FDT AU 2000020545 A Based on WO 200036117
PRAI US 1998-112558P 19981216
AN 2000-431595 [37] WPIDS
AB WO 200036117 A UPAB: 20000807
NOVELTY - Nucleic acids encoding plant CDP (cytosine diphosphate)-alcohol phosphatidyltransferase polypeptide in plants and seeds, are new.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:
(1) an isolated polynucleotide (N1) comprising:
(a) a first nucleotide sequence encoding a polypeptide of at least 50 amino acids that has at least 80 % identity based on the Clustal method of alignment when compared to a polypeptide selected from the 227 (I) or 149 (II) amino acid sequence defined in the specification;
(b) a second nucleotide sequence encoding a polypeptide of at least 100 amino acids that has at least 80 % identity based on the Clustal method of alignment when compared to a 309 (III) amino acid sequence defined in the specification; or
(c) a third nucleotide sequence comprising the complement of (a) or (b);
(2) a polypeptide comprising a first sequence of at least 50 amino acids that has at least 80 % identity based on the Clustal method of alignment when compared to (I) or (II), or a second sequence of at lest 100 amino acids that has at least 80 % identity based on the Clustal method of alignment when compared to (III);
(3) an isolated polynucleotide (N2) comprising:
(a) a first nucleotide sequence encoding a polypeptide of at least 100 amino acids that has at least 80 % identity based on the Clustal method of alignment when compared to a polypeptide selected from the 140 (IV) or 221 (V) amino acid sequence defined in the specification;
(b) a second nucleotide sequence encoding a polypeptide of at least 150 amino acids that has at least 80 % identity based on the Clustal method of alignment when compared to a 208 (VI) amino acid sequence

defined in the specification; or

(c) a third nucleotide sequence comprising the complement of (a) or (b);

(4) a polypeptide comprising a first sequence of at least 100 amino acids that has at least 80 % identity based on the Clustal method of alignment when compared to (IV) or (V), or a second sequence of at lest 150 amino acids that has at least 80 % identity based on the Clustal method of alignment when compared to (VI);

(5) an isolated polynucleotide (N3) comprising:

(a) a first nucleotide sequence encoding a polypeptide of at least 50 amino acids that has at least 90 % identity based on the Clustal method of alignment when compared to a 79 (VII) amino acid sequence defined in the specification;

(b) a second nucleotide sequence encoding a polypeptide of at least 100 amino acids that has at least 80 % identity based on the Clustal method of alignment when compared to a 215 (VIII) amino acid sequence defined in the specification;

(c) a third nucleotide sequence encoding a polypeptide of at least 150 amino acids that has at least 85 % identity based on the Clustal method of alignment when compared to a 227 (IX) amino acid sequence defined in the specification;

(d) a fourth nucleotide sequence encoding a polypeptide of at least 200 amino acids that has at least 80 % identity based on the Clustal method of alignment when compared to a 223 (X) amino acid sequence defined in the specification; or

(e) a fifth nucleotide sequence comprising the complement of (a), (b), (c), (d) or (e);

(6) a polypeptide comprising:

(a) a first sequence of at least 50 amino acids that has at least 90 % identity based on the Clustal method of alignment when compared to (VII);

(b) a second sequence of at least 100 amino acids that has at least 80 % identity based on the Clustal method of alignment when compared to (VIII);

(c) a third sequence of at least 150 amino acids that has at least 85 % identity based on the Clustal method of alignment when compared to (IX);

(d) a fourth sequence of at least 200 amino acids that has at least 80 % identity based on the Clustal method of alignment when compared to (X);

(7) a chimeric gene comprising N1, N2 or N3 operably linked to suitable regulatory sequences;

(8) an isolated host cell comprising the chimeric gene of (7);

(9) a host cell comprising N1, N2 or N3;

(10) a virus comprising N1, N2 or N3;

(11) a method of selecting an isolated polynucleotide that affects the level of expression of a phospholipid biosynthetic enzyme polypeptide in a plant cell, comprising:

(a) constructing N1, N2 or N3, or an isolated polynucleotide comprising a nucleotide sequence of at least one of 30 contiguous nucleotides derived from N1, N2 or N3;

(b) introducing the isolated polynucleotide into a plant cell;

(c) measuring the level of a polypeptide in the plant cell containing the polynucleotide to provide a positive selection means;

(12) a method of obtaining a nucleic acid fragment encoding a phospholipid biosynthetic enzyme, comprising:

(a) synthesizing an oligonucleotide primer comprising a nucleotide sequence of at least one of 30 contiguous nucleotides derived from a sequence (N4) selected from the 950 (XI), 1223 (XII), 705 (XIII), 1109 (XIV), 826 (XV), 1149 (XVI), 1258 (XVII), 1234 (XVIII), 513 (XIX), or 1246 (XX) base pair (bp) sequence (defined in the specification), or the complement of such nucleotide sequences; and

(b) amplifying a nucleic acid sequence using the oligonucleotide

primer;
(13) a method of obtaining a nucleic acid fragment encoding a phospholipid biosynthetic enzyme;
(14) a method for evaluating at least one compound for its ability to inhibit the activity of a phospholipid biosynthetic enzyme;
(15) an isolated polynucleotide comprising the nucleotide sequence having at least one of 30 contiguous nucleotides derived from N4, or the complement of such sequences;
(16) an expression cassette comprising N1, N2 or N3 operably linked to a promoter; and
(17) a method for positive selection of a transformed cell comprising:
(a) transforming a host cell with the chimeric gene of (7) or an expression cassette of (16); and
(b) growing the transformed host cell under conditions which allow expression of the polynucleotide in an amount sufficient to complement a yeast pis or pgs1 mutation to provide a positive selection means.
ACTIVITY - None given.
MECHANISM OF ACTION - CDP-alcohol phosphatidyltransferase.
No biological data given.
USE - The nucleic acid fragments are useful for isolating cDNAs and genes encoding homologous proteins from the same or other plant species.
The nucleic acids and proteins are useful for immunological screening of cDNA expression libraries. The nucleic acids are useful for create transgenic plants in which the polypeptides are present at higher or lower levels than normal or in cell types or developmental stages in which they are not normally found.
Dwg.0/0

L2 ANSWER 20 OF 45 USPATFULL
AN 2000:167740 USPATFULL
TI Method and reagent for inhibiting human immunodeficiency virus replication
IN Draper, Kenneth G., Boulder, CO, United States
Chowrira, Bharat, Boulder, CO, United States
McSwiggen, James, Boulder, CO, United States
Stinchcomb, Dan T., Boulder, CO, United States
Thompson, James D., Boulder, CO, United States
PA Ribozyme Pharmaceuticals, Inc., Boulder, CO, United States (U.S. corporation)
PI US 6159692 20001212
AI US 1999-249215 19990212 (9)
RLI Continuation of Ser. No. US 1997-910408, filed on 12 Aug 1997, now patented, Pat. No. US 5972704 which is a continuation of Ser. No. US 1994-271880, filed on 7 Jul 1994, now patented, Pat. No. US 5693535 which is a continuation-in-part of Ser. No. US 1993-103423, filed on 6 Aug 1993, now abandoned which is a continuation-in-part of Ser. No. US 1992-882886, filed on 14 May 1992, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Schwartzman, Robert A.; Assistant Examiner: Wang, Andrew
LREP McDonnell Boehnen Hulbert & Berghoff
CLMN Number of Claims: 27
ECL Exemplary Claim: 1
DRWN 29 Drawing Figure(s); 20 Drawing Page(s)
LN.CNT 3052
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An enzymatic nucleic acid molecule which cleaves an immunodeficiency virus RNA in a gene required for viral replication, e.g., the nef or tat gene regions.

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CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 21 OF 45 USPATFULL
AN 2000:149919 USPATFULL
TI Miniaturized reaction vessel system, method for performing site-specific biochemical reactions and affinity fractionation for use in DNA sequencing
IN Mirzabekov, Andrei Darievich, Moscow, Russian Federation
Lysov, Yuri Petrovich, Moscow, Russian Federation
Dubley, Svetlana A., Moscow, Russian Federation
PA University of Chicago, Chicago, IL, United States (U.S. corporation)
PI US 6143499 20001107
AI US 1998-99959 19980619 (9)
RLI Division of Ser. No. US 1996-768893, filed on 17 Dec 1996, now patented, Pat. No. US 5905024
DT Utility
FS Granted
EXNAM Primary Examiner: Fredman, Jeffrey
LREP Cherskov & Flaynik
CLMN Number of Claims: 14
ECL Exemplary Claim: 1
DRWN 14 Drawing Figure(s); 9 Drawing Page(s)
LN.CNT 964
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method for fractionating and sequencing DNA via affinity interaction is provided comprising contacting cleaved DNA to a first array of oligonucleotide molecules to facilitate hybridization between said cleaved DNA and the molecules; extracting the hybridized DNA from the molecules; contacting said extracted hybridized DNA with a second array of oligonucleotide molecules, wherein the oligonucleotide molecules in the second array have specified base sequences that are complementary to said extracted hybridized DNA; and attaching labeled DNA to the second array of oligonucleotide molecules, wherein the labeled re-hybridized DNA have sequences that are complementary to the oligomers. The invention further provides a method for performing multi-step conversions of the chemical structure of compounds comprising supplying an array of polyacrylamide vessels separated by hydrophobic surfaces; immobilizing a plurality of reactants, such as enzymes, in the vessels so that each vessel contains one reactant; contacting the compounds to each of the vessels in a predetermined sequence and for a sufficient time to convert the compounds to a desired state; and isolating the converted compounds from said array.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 22 OF 45 USPATFULL
AN 2000:142531 USPATFULL
TI Deoxynucleic alkyl and alkoxy thiourea compounds
IN Bruice, Thomas C., Santa Barbara, CA, United States
Arya, Dev P., Clemson, SC, United States
PA The Regents of the University of California, Oakland, CA, United States (U.S. corporation)
PI US 6136965 20001024
AI US 1999-347443 19990702 (9)
PRAI US 1998-91481P 19980702 (60)
US 1998-111800P 19981211 (60)
DT Utility
FS Granted
EXNAM Primary Examiner: Elliott, George C.; Assistant Examiner: Lacourciere, Karen A.
LREP Mandel & Adriano
CLMN Number of Claims: 12

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ECL Exemplary Claim: 1
DRWN 20 Drawing Figure(s); 11 Drawing Page(s)
LN.CNT 1250
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides novel deoxynucleic alkyl thiourea (dNXt) oligonucleotide compounds for use in antisense or antigene therapy.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 23 OF 45 USPATFULL
AN 2000:138056 USPATFULL
TI Method and reagent for inhibiting hepatitis C virus replication
IN Draper, Kenneth G., Boulder, CO, United States
PA Ribozyme Pharmaceuticals, Inc., Boulder, CO, United States (U.S. corporation)
PI US 6132966 20001017
AI US 1998-64156 19980421 (9)
RLI Continuation of Ser. No. US 1996-774306, filed on 23 Dec 1996, now patented, Pat. No. US 5869253 which is a continuation of Ser. No. US 1994-182968, filed on 13 Jan 1994, now patented, Pat. No. US 5610054 which is a continuation-in-part of Ser. No. US 1992-882888, filed on 14 May 1992, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Elliott, George C.; Assistant Examiner: Wang, Andrew
CLMN Number of Claims: 29
ECL Exemplary Claim: 1
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 4668
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An enzymatic RNA molecule which specifically cleaves RNA of a hepatitis C virus.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 24 OF 45 USPATFULL
AN 2000:9884 USPATFULL
TI Oligonucleotides possessing zwitterionic moieties
IN Cook, Alan Frederick, Cedar Grove, NJ, United States
PA Genzyme Corporation, Framingham, MA, United States (U.S. corporation)
PI US 6017895 20000125
AI US 1992-833146 19920210 (7)
DT Utility
FS Granted
EXNAM Primary Examiner: Kunz, Gary L.
LREP Olstein, Elliot M., Lillie, Raymond J.
CLMN Number of Claims: 12
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 470
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An oligonucleotide wherein at least one nucleotide unit includes a phosphonate moiety having the following structural formula: ##STR1## , wherein X is a zwitterionic moiety. Such oligonucleotides have improved cellular uptake capabilities and improved resistance against nuclease activity.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 25 OF 45 USPATFULL
AN 2000:9745 USPATFULL
TI Method and reagent for inhibiting hepatitis B virus replication

09567863

IN Draper, Kenneth G., Solon, OH, United States
PA Ribozyme Pharmaceuticals, Inc., Cleveland, OH, United States (U.S. corporation)
PI US 6017756 20000125
AI US 1994-193627 19940207 (8)
RLI Continuation of Ser. No. US 1992-882712, filed on 14 May 1992, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Patterson, Jr., Charles L.
LREP Lyon & Lyon LLP
CLMN Number of Claims: 6
ECL Exemplary Claim: 1
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 1300
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An enzymatic RNA molecule which specifically cleaves RNA of a hepatitis B virus.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 26 OF 45 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AN 2000:403310 BIOSIS
DN PREV200000403310
TI Identification of sequence motifs in oligonucleotides whose presence is correlated with antisense activity.
AU Matveeva, O. V. (1); Tsodikov, A. D.; Giddings, M.; Freier, S. M.; Wyatt, J. R.; Spiridonov, A. N.; Shabalina, S. A.; Gesteland, R. F.; Atkins, J. F.
CS (1) Department of Human Genetics, University of Utah, 15N 2030E Room 7410, Salt Lake City, UT, 84112-5330 USA
SO Nucleic Acids Research, (August 1, 2000) Vol. 28, No. 15, pp. 2862-2865. print.
ISSN: 0305-1048.
DT Article
LA English
SL English
AB Design of antisense oligonucleotides targeting any mRNA can be much more efficient when several activity-enhancing motifs are included and activity-decreasing motifs are avoided. This conclusion was made after statistical analysis of data collected from >1000 experiments with **phosphorothioate**-modified **oligonucleotides**. Highly significant **positive** correlation between the presence of motifs CCAC, TCCC, ACTC, GCCA and CTCT in the oligonucleotide and its antisense efficiency was demonstrated. In addition, negative correlation was revealed for the motifs GGGG, ACTG, AAA and TAA. It was found that the likelihood of activity of an oligonucleotide against a desired mRNA target is sequence motif content dependent.

L2 ANSWER 27 OF 45 USPATFULL
AN 1999:151009 USPATFULL
TI Method and reagent for inhibiting P-glycoprotein (mdr-1-gene)
IN Thompson, James D., Solon, OH, United States
PA Ribozyme Pharmaceuticals, Inc., Cleveland, OH, United States (U.S. corporation)
PI US 5989906 19991123
AI US 1994-192942 19940207 (8)
RLI Continuation of Ser. No. US 1992-882885, filed on 14 May 1992, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Patterson, Jr., Charles L.

09567863

LREP Lyon & Lyon LLP
CLMN Number of Claims: 6
ECL Exemplary Claim: 1
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 954
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An enzymatic RNA molecule which specifically cleaves mRNA encoded by an mdr-1 gene.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 28 OF 45 USPATFULL
AN 1999:132593 USPATFULL
TI HIV nef targeted ribozymes
IN Draper, Kenneth G., Boulder, CO, United States
Chowrira, Bharat, Boulder, CO, United States
McSwiggen, James, Boulder, CO, United States
Stinchcomb, Dan T., Boulder, CO, United States
Thompson, James D., Boulder, CO, United States
PA Ribozyme Pharmaceuticals, Inc., Boulder, CO, United States (U.S. corporation)
PI US 5972704 19991026
AI US 1997-910408 19970813 (8)
RLI Continuation of Ser. No. US 1994-271880, filed on 7 Jul 1994, now patented, Pat. No. US 5693535 which is a continuation-in-part of Ser. No. US 1992-882886, filed on 14 May 1992, now abandoned And Ser. No. US 1993-103423, filed on 6 Aug 1993, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: LeGuyader, John L.
LREP Lyon & Lyon LLP
CLMN Number of Claims: 22
ECL Exemplary Claim: 1
DRWN 15 Drawing Figure(s); 20 Drawing Page(s)
LN.CNT 3004
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An enzymatic nucleic acid molecule which cleaves an immunodeficiency virus RNA in a gene required for viral replication, e.g., the nef or tat gene regions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 29 OF 45 USPATFULL
AN 1999:132588 USPATFULL
TI Method and reagent for inhibiting herpes simplex virus replication
IN Draper, Kenneth G., Boulder, CO, United States
PA Ribozyme Pharmaceuticals, Inc., Boulder, CO, United States (U.S. corporation)
PI US 5972699 19991026
AI US 1997-835269 19970408 (8)
RLI Continuation of Ser. No. US 1996-623891, filed on 25 Mar 1996, now patented, Pat. No. US 5795778 which is a continuation of Ser. No. US 1994-238200, filed on 4 Jun 1994, now abandoned which is a continuation of Ser. No. US 1992-987133, filed on 7 Dec 1992, now abandoned which is a continuation-in-part of Ser. No. US 1992-948359, filed on 18 Sep 1992, now abandoned which is a continuation-in-part of Ser. No. US 1992-882921, filed on 14 May 1992, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Patterson, Jr., Charles L.
LREP Lyon & Lyon LLP
CLMN Number of Claims: 21

09567863

ECL Exemplary Claim: 1
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 2028
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An enzymatic RNA molecule which specifically cleaves a herpes simplex virus mRNA molecule.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 30 OF 45 USPATFULL
AN 1999:125058 USPATFULL
TI Antisense inhibition of ras gene with chimeric and alternating oligonucleotides
IN Ecker, David J., Leucadia, CA, United States
Cook, Phillip Dan, Escondido, CA, United States
Monia, Brett P., La Costa, CA, United States
Freier, Susan M., San Diego, CA, United States
Sanghvi, Yogesh S., Encinitas, CA, United States
PA Isis Pharmaceuticals, Inc., Carlsbad, CA, United States (U.S. corporation)
PI US 5965722 19991012
AI US 1997-848840 19970430 (8)
RLI Continuation-in-part of Ser. No. US 1994-317289, filed on 3 Oct 1994, now patented, Pat. No. US 5792844 Ser. No. Ser. No. US 1997-794493, filed on 4 Feb 1997 Ser. No. Ser. No. US 1994-335046, filed on 7 Nov 1994, now patented, Pat. No. US 5808023 Ser. No. Ser. No. US 1995-488256, filed on 7 Jun 1995 Ser. No. Ser. No. US 1995-465866, filed on 6 Jun 1995 Ser. No. Ser. No. US 1995-468037, filed on 6 Jun 1995, now patented, Pat. No. US 5859221 Ser. No. Ser. No. US 1995-411734, filed on 3 Apr 1995 And Ser. No. US 1994-227180, filed on 13 Apr 1994, now patented, Pat. No. US 5866698 which is a continuation of Ser. No. US 1991-801168, filed on 20 Nov 1991, now abandoned , said Ser. No. US 317289 which is a continuation of Ser. No. US 1993-39979, filed on 30 Mar 1993, now abandoned , said Ser. No. US 794493 which is a division of Ser. No. US 1994-300072, filed on 2 Sep 1994, now patented, Pat. No. US 5618704 which is a continuation of Ser. No. US 1993-40933, filed on 31 Mar 1993, now abandoned , said Ser. No. US 335046 which is a division of Ser. No. US 1993-40903, filed on 31 Mar 1993, now patented, Pat. No. US 5386023 , said Ser. No. US 488256 which is a continuation-in-part of Ser. No. US 1993-40526, filed on 31 Mar 1993, now patented, Pat. No. US 5489677 , said Ser. No. US 465866 which is a continuation-in-part of Ser. No. US 1994-244993, filed on 21 Jun 1994, now patented, Pat. No. US 5623065 which is a continuation of Ser. No. WO 1992-US11339, filed on 23 Dec 1992, now abandoned which is a continuation-in-part of Ser. No. US 1991-814961, filed on 24 Dec 1991, now abandoned , said Ser. No. US 468037 which is a continuation of Ser. No. WO 1993-US9346, filed on 1 Oct 1993, now abandoned which is a continuation-in-part of Ser. No. US 1993-7996, filed on 21 Jan 1993, now abandoned And Ser. No. US 1992-958134, filed on 5 Oct 1992, now abandoned which is a continuation-in-part of Ser. No. US 1991-715196, filed on 14 Jun 1991, now abandoned , said Ser. No. US 7996 which is a continuation-in-part of Ser. No. US 715196 , said Ser. No. US 39979 Ser. No. Ser. No. US 40933 Ser. No. Ser. No. US 40903 And Ser. No. US 40526 which is a continuation-in-part of Ser. No. WO 1992-US4294, filed on 21 May 1992, now abandoned which is a continuation-in-part of Ser. No. US 1991-703619, filed on 21 May 1991, now patented, Pat. No. US 5378825
DT Utility
FS Granted
EXNAM Primary Examiner: Fredman, Jeffrey
LREP Woodcock Washburn Kurtz Mackiewicz & Norris, LLP
CLMN Number of Claims: 29
ECL Exemplary Claim: 1

09567863

DRWN 37 Drawing Figure(s); 30 Drawing Page(s)
LN.CNT 3168
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compositions and methods are provided for the modulation of expression of the human ras gene in both the normal and activated forms. Oligonucleotides are provided that have methylene(methylimino) linkages alternating with phosphorothioate or phosphodiester linkages. Further oligonucleotides are provide that have a first region having a methylene(methylimino) linkage alternating with a phosphorothioate or phosphodiester linkage and a second region having phosphorothioate linkages. Such oligonucleotides can be used for diagnostics as well as for research purposes including methods for diagnosis, detection and treatment of conditions arising from the activation of the H-ras gene.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 31 OF 45 USPATFULL
AN 1999:59014 USPATFULL
TI Method for performing site-specific affinity fractionation for use in DNA sequencing
IN Mirzabekov, Andrei Darievich, Moscow, Russian Federation
Lysov, Yuri Petrovich, Moscow, Russian Federation
Dubley, Svetlana A., Moscow, Russian Federation
PA University of Chicago, Chicago, IL, United States (U.S. corporation)
PI US 5905024 19990518
AI US 1996-768893 19961217 (8)
DT Utility
FS Granted
EXNAM Primary Examiner: Jones, W. Gary; Assistant Examiner: Fredman, Jeffrey
LREP Cherskov & Flaynik
CLMN Number of Claims: 6
ECL Exemplary Claim: 1
DRWN 14 Drawing Figure(s); 9 Drawing Page(s)
LN.CNT 763
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method for fractionating and sequencing DNA via affinity interaction is provided comprising contacting cleaved DNA to a first array of oligonucleotide molecules to facilitate hybridization between said cleaved DNA and the molecules; extracting the hybridized DNA from the molecules; contacting said extracted hybridized DNA with a second array of oligonucleotide molecules, wherein the oligonucleotide molecules in the second array have specified base sequences that are complementary to said extracted hybridized DNA; and attaching labeled DNA to the second array of oligonucleotide molecules, wherein the labeled re-hybridized DNA have sequences that are complementary to the oligomers. The invention further provides a method for performing multi-step conversions of the chemical structure of compounds comprising supplying an array of polyacrylamide vessels separated by hydrophobic surfaces; immobilizing a plurality of reactants, such as enzymes, in the vessels so that each vessel contains one reactant; contacting the compounds to each of the vessels in a predetermined sequence and for a sufficient time to convert the compounds to a desired state; and isolating the converted compounds from said array.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 32 OF 45 USPATFULL
AN 1999:18924 USPATFULL
TI Method and reagent for inhibiting hepatitis C virus replication
IN Draper, Kenneth G., Boulder, CO, United States
PA Ribozyme Pharmaceuticals, Inc., Boulder, CO, United States (U.S. corporation)

09567863

PI US 5869253 19990209
AI US 1996-774306 19961226 (8)
RLI Continuation of Ser. No. US 1994-182968, filed on 13 Jan 1994, now patented, Pat. No. US 5610054 which is a continuation-in-part of Ser. No. US 1992-882888, filed on 14 May 1992, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: LeGuyader, John L.
LREP Lyon & Lyon LLP
CLMN Number of Claims: 22
ECL Exemplary Claim: 1
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 3505
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An enzymatic RNA molecule which specifically cleaves RNA of a hepatitis C virus.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 33 OF 45 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 2
AN 2000:80216 BIOSIS
DN PREV200000080216
TI Pharmacokinetics and tolerability of intravenous trecovirsen (GEM(R)91), an antisense **phosphorothioate oligonucleotide**, in HIV-**positive** subjects.
AU Sereni, Daniel; Tubiana, Roland; Lascoux, Caroline; Katlama, Christine; Taulera, Oliver; Bourque, Andre; Cohen, Aharon; Dvorchik, Barry; Martin, R. Russell (1); Tournerie, Christophe; Gouyette, Alain; Schechter, Paul J.
CS (1) Hybridon, Inc., 155 Fortune Boulevard, Milford, MA USA
SO Journal of Clinical Pharmacology, (Jan., 1999) Vol. 39, No. 1, pp. 47-54. ISSN: 0091-2700.
DT Article
LA English
SL English
AB Trecovirsen, a 25-mer antisense phosphorothioate oligonucleotide targeted at the gag site of the HIV gene, was administered to HIV-positive volunteers as an IV infusion. Single doses ranged from 0.1 to 2.5 mg/kg in an ascending escalation in cohorts of 6 to 12 subjects. Plasma trecovirsen concentrations and pharmacokinetic parameters could be assessed at doses gtoreq0.3 mg/kg. Peak plasma concentrations and AUC values increased disproportionately with increasing dose while elimination half-life increased and plasma clearance decreased, indicating a saturable process over this dose range. The only significant adverse event observed was an isolated, transitory increase in activated partial thromboplastin time at doses gtoreq 2.0 mg/kg that was related to plasma trecovirsen concentrations and is attributed to the polyanionic character of the molecule. Thus, trecovirsen administration was well tolerated in single IV doses up to 2.5 mg/kg.

L2 ANSWER 34 OF 45 USPATFULL
AN 1998:104729 USPATFULL
TI Enzymatic RNA with activity to RAS
IN Thompson, James D., Boulder, CO, United States
Draper, Kenneth G., Boulder, CO, United States
PA Ribozyme Pharmaceuticals, Inc., Boulder, CO, United States (U.S. corporation)
PI US 5801158 19980901
AI US 1996-777918 19961223 (8)
RLI Continuation of Ser. No. US 1992-936110, filed on 26 Aug 1992, now patented, Pat. No. US 5610052
DT Utility

09567863

FS Granted
EXNAM Primary Examiner: LeGuyader, John L.
LREP Lyon & Lyon LLP
CLMN Number of Claims: 22
ECL Exemplary Claim: 1,2,19
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 1125
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An enzymatic RNA molecule which cleaves mRNA associated with development or maintenance of colon carcinoma.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 35 OF 45 USPATFULL
AN 1998:98803 USPATFULL
TI Method and reagent for inhibiting herpes simplex virus replication
IN Draper, Kenneth G., Boulder, CO, United States
PA Ribozyme Pharmaceuticals, Inc., Boulder, CO, United States (U.S. corporation)
PI US 5795778 19980818
AI US 1996-623891 19960325 (8)
RLI Continuation of Ser. No. US 1994-238200, filed on 4 May 1994, now abandoned which is a continuation of Ser. No. US 1992-987133, filed on 7 Dec 1992, now abandoned which is a continuation-in-part of Ser. No. US 1992-948359, filed on 18 Sep 1992, now abandoned which is a continuation-in-part of Ser. No. US 1992-882921, filed on 14 May 1992, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Patterson, Jr., Charles L.
LREP Lyon & Lyon LLP
CLMN Number of Claims: 10
ECL Exemplary Claim: 1
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 1993
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An enzymatic RNA molecule which specifically cleaves a herpes simplex virus mRNA molecule.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 36 OF 45 USPATFULL
AN 1998:51473 USPATFULL
TI Method and reagent for treatment of diseases caused by expression of the bcl-2 gene
IN Thompson, James D., Boulder, CO, United States
Draper, Kenneth G., Boulder, CO, United States
PA Ribozyme Pharmaceuticals, Inc., Boulder, CO, United States (U.S. corporation)
PI US 5750390 19980512
AI US 1992-936421 19920826 (7)
DT Utility
FS Granted
EXNAM Primary Examiner: Crouch, Deborah
LREP Lyon & Lyon LLP
CLMN Number of Claims: 13
ECL Exemplary Claim: 1
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 1019
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An enzymatic RNA molecule which cleaves bcl.2 mRNA associated with development or maintenance of follicular lymphoma.

09567863

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 37 OF 45 USPATFULL
AN 97:112369 USPATFULL
TI HIV targeted ribozymes
IN Draper, Kenneth G., Boulder, CO, United States
Chowrira, Bharat, Boulder, CO, United States
McSwiggen, James, Boulder, CO, United States
Stinchcomb, Dan T., Boulder, CO, United States
Thompson, James D., Boulder, CO, United States
PA Ribozyme Pharmaceuticals, Inc., Boulder, CO, United States (U.S. corporation)
PI US 5693535 19971202
AI US 1994-271880 19940707 (8)
RLI Continuation-in-part of Ser. No. US 1992-882886, filed on 14 May 1992, now abandoned And Ser. No. US 1993-103423, filed on 6 Aug 1993, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: LeGuyader, John L.
LREP Lyon & Lyon LLP
CLMN Number of Claims: 100
ECL Exemplary Claim: 1
DRWN 30 Drawing Figure(s); 20 Drawing Page(s)
LN.CNT 2582
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An enzymatic nucleic acid molecule which cleaves an immunodeficiency virus RNA in a gene required for viral replication, e.g., the nef or tat gene regions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 38 OF 45 USPATFULL
AN 97:51905 USPATFULL
TI PML-RARA targeted ribozymes
IN Thompson, James D., Boulder, CO, United States
Draper, Kenneth G., Boulder, CO, United States
PA Ribozyme Pharmaceuticals, Inc., Boulder, CO, United States (U.S. corporation)
PI US 5639655 19970617
AI US 1994-233030 19940425 (8)
RLI Continuation of Ser. No. US 1993-8910, filed on 19 Jan 1993, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: LeGuyader, John
LREP Lyon & Lyon
CLMN Number of Claims: 9
ECL Exemplary Claim: 1
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 1465
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An enzymatic RNA molecule which cleaves mRNA associated with development or maintenance of promyelocytic leukemia.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 39 OF 45 USPATFULL
AN 97:33649 USPATFULL
TI Method and reagent for inhibiting T-cell leukemia virus replication
IN Draper, Kenneth G., Solon, OH, United States

09567863

PA Ribozyme Pharmaceuticals Inc., Boulder, CO, United States (U.S. corporation)
PI US 5622854 19970422
AI US 1994-192941 19940207 (8)
RLI Continuation of Ser. No. US 1992-882714, filed on 14 May 1992, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: LeGuyader, John L.
LREP Lyon & Lyon
CLMN Number of Claims: 11
ECL Exemplary Claim: 1,9,10
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 1295
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An enzymatic RNA molecule which specifically cleaves RNA of HTLV-1.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 40 OF 45 USPATFULL
AN 97:27080 USPATFULL
TI Ribozymes targeted to TNF-.alpha. RNA
IN Sullivan, Sean M., Boulder, CO, United States
Draper, Kenneth G., Boulder, CO, United States
PA Ribozyme Pharmaceuticals, Inc., Boulder, CO, United States (U.S. corporation)
PI US 5616490 19970401
AI US 1995-434503 19950504 (8)
RLI Continuation of Ser. No. US 1993-8895, filed on 19 Jan 1993, now abandoned which is a continuation-in-part of Ser. No. US 1992-989849, filed on 7 Dec 1992, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: LeGuyader, John L.
LREP Lyon & Lyon
CLMN Number of Claims: 8
ECL Exemplary Claim: 1,6,7
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 1540
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An enzymatic RNA molecule which cleaves mRNA associated with development or maintenance of an inflammatory disease.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 41 OF 45 USPATFULL
AN 97:20425 USPATFULL
TI Enzymatic RNA molecule targeted against Hepatitis C virus
IN Draper, Kenneth G., Boulder, CO, United States
PA Ribozyme Pharmaceuticals, Inc., Boulder, CO, United States (U.S. corporation)
PI US 5610054 19970311
AI US 1994-182968 19940113 (8)
RLI Continuation-in-part of Ser. No. US 1992-882888, filed on 14 May 1992, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: LeGuyader, John L.
LREP Lyon & Lyon
CLMN Number of Claims: 16
ECL Exemplary Claim: 1,6
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)

09567863

LN.CNT 1920
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An enzymatic RNA molecule which specifically cleaves RNA of a hepatitis C virus.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 42 OF 45 USPATFULL
AN 97:20423 USPATFULL
TI Enzymatic RNA with activity to ras
IN Thompson, James D., Boulder, CO, United States
Draper, Kenneth G., Boulder, CO, United States
PA Ribozyme Pharmaceuticals Inc., Boulder, CO, United States (U.S. corporation)
PI US 5610052 19970311
AI US 1992-936110 19920826 (7)
DT Utility
FS Granted
EXNAM Primary Examiner: Stone, Jacqueline M.; Assistant Examiner: Crouch, Deborah
LREP Lyon & Lyon
CLMN Number of Claims: 12
ECL Exemplary Claim: 1
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 1037
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An enzymatic RNA molecule which cleaves mRNA associated with development or maintenance of colon carcinoma.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 43 OF 45 USPATFULL
AN 97:9935 USPATFULL
TI ErbB2/neu targeted ribozymes
IN Thompson, James D., Boulder, CO, United States
Draper, Kenneth G., Boulder, CO, United States
PA Ribozyme Pharmaceuticals, Inc., Boulder, CO, United States (U.S. corporation)
PI US 5599704 19970204
AI US 1995-435350 19950505 (8)
RLI Continuation of Ser. No. US 1992-936531, filed on 26 Aug 1992
DT Utility
FS Granted
EXNAM Primary Examiner: LeGuyader, John L.
LREP Lyon & Lyon
CLMN Number of Claims: 14
ECL Exemplary Claim: 1,7,8
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 1494
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An enzymatic RNA molecule which cleaves mRNA associated with development or maintenance of breast cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 44 OF 45 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AN 1997:440308 BIOSIS
DN PREV199799739511
TI Detection of the eaeA gene in Escherichia coli isolated from children with diarrhoea and characterization of the strains possessing the eaeA gene.
AU Bi Zhenqiang, K. Nagayama (1); Mwangudza, A. K.; et al.
CS (1) Shandong Provincial Anti-epidemic Station, Jinan 250014 China

09567863

SO Zhonghua Weishengwuxue He Mianyixue Zazhi, (1997) Vol. 17, No. 4, pp. 305-308.
ISSN: 0254-5101.
DT Article
LA Chinese
SL Chinese; English
AB Two hundred and twenty one strains of Escherichia coli of 37 serogroups isolated from children with diarrhoea in Kenya were examined for the eaeA gene, which encodes the expression of the attaching and effacing lesions of Escherichia coli, by using an alkaline **phosphatase** conjugated **oligonucleotide** probe. The strains **positive** for eaeA gene were further assayed for bfpA and slt genes, and also for HEp-2 adhesion and fluorescent actin staining (FAS) tests. The results showed that the eaeA prevalence rate was 19.5%, with those in EPEC, EHEC and other serogroups being 31.6%, 66.7% and 8.9%, respectively. Based on the probes for bfpA and slt genes, HEp-2 adhesion and FAS tests, 5 virulence patterns were differentiated among eaeA-harboring E. coli. This indicates that eaeA gene is not limited to EPEC and EHEC, that the eaeA-harboring E. coli are heterogeneous with respect to their virulence determinants.

L2 ANSWER 45 OF 45 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 3
AN 1994:130347 BIOSIS
DN PREV199497143347
TI Antisense BCR-ABL oligonucleotides induce apoptosis in the Philadelphia chromosome-positive cell line BV173.
AU Smetsers, Toon F. C. M.; Skorski, Tomasz; Van De Locht, Louis T. F.; Wessels, Hans M. C.; Pennings, Arie H. M.; De Witte, Theo; Calabretta, Bruno; Mensink, Ewald J. B. M. (1)
CS (1) Dep. Internal Med., Div. Hematol., University Hospital St. Radboud, PO Box 9101, 6500 HB Nijmegen Netherlands
SO Leukemia (Basingstoke), (1994) Vol. 8, No. 1, pp. 129-140.
ISSN: 0887-6924.
DT Article
LA English
AB BCR-ABL antisense oligonucleotides can specifically reduce colony formation of early hematopoietic progenitor cells from chronic myeloid leukemia (CML) patients. Little is known about the mechanism of this inhibition. We studied the inhibition of the bcr-abl oncogene using fluorescein-labeled **phosphorothioate oligonucleotides** in the Philadelphia chromosome-**positive** cell line BV173. **Oligonucleotide** stability, uptake, bcr-abl mRNA degradation, inhibition of cell proliferation, and cell death were studied. The oligonucleotide uptake was directly dependent on the extracellular concentration and was constant over the first 18 h of incubation. After that the uptake rate decreased. We detected a decrease in bcr-abl mRNA after 3 days of treatment with antisense oligonucleotides, but much less in controls. The controls used in the experiments were the sense oligonucleotide, equimolar amounts of sense and antisense, and an untreated control. Antisense oligonucleotides completely inhibited cell growth of BV173 cells and did not inhibit growth of HL-60 cells, whereas control oligonucleotides had no such effect on either cell line. An oligonucleotide specific for the other CML breakpoint was also effective in reducing cell growth of BV173. By the use of a DNA double staining technique to discriminate between necrotic and apoptotic cells, we detected a large number of apoptotic cells in antisense treated BV173 cultures after 5 days of treatment as compared to controls. We conclude that antisense BCR-ABL oligonucleotides reduce bcr-abl mRNA expression in BV173 cells mainly in a sequence-specific manner and induce apoptosis.

=> d l2 17 kwic

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L2 ANSWER 17 OF 45 USPATFULL
DETD A comparison with other **positively** charged **oligonucleotides**-ethylmorpholino **phosphoramidate** (Tm/bp=2-3), aminomethyl phosphonate (Tm/bp=2-3) (Letsinger et al., supra), containing positively charged ammonium groups connected via an alkyl linkage (FIG. 1,. . .

=> d l2 1-45 kwic

L2 ANSWER 1 OF 45 WPIDS (C) 2003 THOMSON DERWENT
AB WO2003004512 A UPAB: 20030328
NOVELTY - A salt complex (Q) comprises an organic base and a 1,1-dioxo-1,2-dihydro-1 lambda -6-benzo(d)isothiazol-3-one (I).
DETAILED DESCRIPTION - A salt complex (Q) comprises an organic base and a 1,1-dioxo-1,2-dihydro-1 lambda -6-benzo(d)isothiazol-3-one of formula (I).
p = 0 - 4;
X7 = O or S;
R = heterocyclyl, (optionally substituted), R13, halo, -NR11R12, -OR13, -OC(O)R13, -C(O)OR13, cyano, -CHO, -COR13, -NHCOR13, or SR13;
CR+R = optionally saturated a six membered ring;
R11, R12 = -H or R13;
NR11+R12 = heterocyclyl; and
R13 = aliphatic group, aryl or aralkyl (all optionally substituted).
INDEPENDENT CLAIMS are included for the following:
(1) an activator (A1) solution comprising an aprotic organic solvent, an organic base and (I);
(2) synthesis (S1) of an oligonucleotide using phosphoramidite chemistry involving coupling a nucleoside or a nascent oligonucleotide having a free hydroxy or thiol group (preferably a free 5'-hydroxy group) and a nucleoside phosphoramidite (a) (preferably a nucleoside 3'-phosphoramidite) in the presence of (I) or an activator comprising a mixture of (I) and an N-alkylimidazole (preferably N-methylimidazole);
(3) condensation (B1) of an N-mer oligonucleotide or a nucleoside of formula (II) with the nucleoside phosphoramidite of formula (Ia) involving contacting (II) with (Ia) and (I) to form an oligonucleotide having 5'-trivalent phosphorus linkage of formula (III); and
(4) preparation (C1) of (Q) involving contacting (I) with an organic base.
X1, X4 = -O- or -S-;
X2 = -O-, -S- or NR14;
X3 = -O-, -S-, -CH2-, or -(CH2)2-;
X5 = OH or SH;
R1 = alcohol or thio protecting group;
R2 = -H, optionally substituted aliphatic group, -F -OR6, -NR7R8, or-SR9;
R3 = -OCH2CH2CN, -SCH2CH2CN, optionally substituted aliphatic group, -OR10, -SR10, -O-CH2CH2-Si(CH3)2C6H5, -OCH2CH2-S(O)2-CH2CH3, -O-CH2CH2C6H4-NO2, -S-CH2CH2-Si(CH3)2C6H5, -S-CH2CH2S(O)2-CH2CH3, or -S-CH2CH2-C6H4-NO2;
R4, R5, R10 = R13;
NR4+R5, NR7+R8 and NR18+R19 = heterocyclyl;
R6 = H, R13 or -(CH2)q-NR18R19;
R7, R8 = H, optionally substituted aliphatic group or an amine protecting group;
R9 = H, optionally substituted aliphatic group, or a thio protecting group;
R14 = -H, alkyl, aryl or aralkyl;
R16 = hydroxy, thio or amino protecting group, -(CH2)q-NR18R19, a solid support, or a cleavable linker attached to a solid support;

R18 and R19 = heteroaryl or heteroalkyl (both optionally substituted), H, R13 or amine protecting group;
q = 1 - 6;
B' = H, natural or unnatural nucleobase, protected natural or unnatural nucleobase or a optionally protected heterocycle; and
n = 0 or positive number.
USE - As activators in the oligonucleotide synthesis (claimed).
ADVANTAGE - (I) in the presence of an organic base promotes phosphoramidite condensation reaction with at least equal efficiency as tetrazole with fewer side products. The complex is non-explosive, therefore safer to use than tetrazole, particularly in large-scale synthesis of oligonucleotide.
Dwg.0/0

L2 ANSWER 2 OF 45 USPATFULL
SUMM [2043] SEQ ID NO:2003 is the determined cDNA sequence of clone 61496359

L2 ANSWER 3 OF 45 USPATFULL
DETD . . . of one to six positively-charged lysine, arginine or histidine residues, and combinations of these, able to interact directly with the **phosphate** groups of plasmid or **oligonucleotide** DNA, compensating for part of the **positive** charges provided by the cationic lipids. GAAIGLAWIPYFGPAA (SEQ ID NO:7) is derived from the fusogenic peptide of the Ebola virus. . . with the addition of one to six positively-charged lysine, arginine or histidine residues (K/R/H).sub.1-6 able to interact directly with the **phosphate** groups of plasmid or **oligonucleotide** DNA, compensating for part of the **positive** charges provided by the cationic lipids. The fusogenic peptides in the fusogenic/NLS conjugates represent hydrophobic amino acid stretches, and smaller. . .

L2 ANSWER 4 OF 45 USPATFULL
DETD . . . the cell membrane. The present strategies for reducing the oligonucleotide charge include: modification of internucleotide linkages by methylphosphonates, use of **phosphoramidites**, linking **oligonucleotides** to **positively** charged molecules, and creating complex packages composed of oligonucleotides, lipids and specific receptors or effectors for targeted cells. Examples of. . .

L2 ANSWER 5 OF 45 USPATFULL
SUMM [2044] SEQ ID NO:1997 is the determined cDNA sequence for clone 62227174 R0394:B12

L2 ANSWER 6 OF 45 USPATFULL
SUMM [2043] SEQ ID NO: 2004 represents the cDNA sequence for clone AA165409.

L2 ANSWER 7 OF 45 USPATFULL
SUMM . . . Alternatively, amplification techniques, such as those described above, can be useful for obtaining a full length coding sequence from a **partial** cDNA **sequence**. One such amplification technique **is** inverse PCR (see Triglia et al., Nucl. Acids Res. 16:8186, 1988), which uses restriction enzymes to generate a fragment in the known region of the gene. The fragment is then circularized by intramolecular **ligation and used** as a template **for PCR with** divergent primers **derived** from the known region. Within **an** alternative **approach**, sequences adjacent to a partial sequence may be retrieved by amplification with a primer to a linker sequence and a. . .

L2 ANSWER 8 OF 45 USPATFULL
DRWD [0071] FIG. 17 shows the structures of a group of charge balances **oligonucleotide** probes made using neutral and **positively** charged **phosphoramidites**.

L2 ANSWER 9 OF 45 USPATFULL
DETD . . . the cell membrane. The present strategies for reducing the oligonucleotide charge include: modification of internucleotide linkages by methylphosphonates, use of **phosphoramidites**, linking **oligonucleotides** to **positively** charged molecules, and creating complex packages composed of oligonucleotides, lipids and specific receptors or effectors for targeted cells. Examples of. . .

L2 ANSWER 10 OF 45 USPATFULL
DETD . . . the cell membrane. The present strategies for reducing the oligonucleotide charge include: modification of internucleotide linkages by ethylphosphonates, use of **phosphoramidites**, linking **oligonucleotides** to **positively** charged molecules, and creating complex packages composed of oligonucleotides, lipids and specific receptors or effectors for targeted cells. Examples of. . .

L2 ANSWER 11 OF 45 USPATFULL
DETD . . . the cell membrane. The present strategies for reducing the oligonucleotide charge include: modification of internucleotide linkages by ethylphosphonates, use of **phosphoramidites**, linking **oligonucleotides** to **positively** charged molecules, and creating complex packages composed of oligonucleotides, lipids and specific receptors or effectors for targeted cells. Examples of. . .

L2 ANSWER 12 OF 45 USPATFULL
DETD . . . range of doses. The chimeric oligonucleotides that incorporated the MMI nucleoside units had responses equivalent to or better than the **phosphorothioate oligonucleotide** used as the **positive** control for these tests with **oligonucleotides** having 1 or 2 MMI linkages (oligos 14896, 14897 and 14898) in each of the flank regions showing the greatest. . .

L2 ANSWER 13 OF 45 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AB. . . a relative standard deviation of 1.5% in a pH 7.0 phosphate buffer solution. In contrast, no responses to a non-complementary **oligonucleotide** were observed. The electrode surface was **positively** charged in the **phosphate** buffer solution due to the protonated amine group of the thiol, where the electron transfer reaction between the electroactive marker. . .

L2 ANSWER 14 OF 45 WPIDS (C) 2003 THOMSON DERWENT
TECH. . .
has the opposite polarity of the eTag reporters. The eTag reporters are negatively charged and the reciprocal binding member is **positively** charged. In M2, the **oligonucleotides** and regions are joined by **phosphate** linkages. The synthesizing and addition steps employs phosphoramidites for producing the member. The mass-modifying group is a neutral group (such. . .

L2 ANSWER 15 OF 45 USPATFULL
DETD . . . only 1 DNA monomer, lanes 3 and 4 respectively. Lane 1 is a negative control. Lanes 8 and 9 are **positive** controls, where 6nt and 9nt **oligonucleotides** are ligated to 5'-**phosphate** oligonucleotides. The electrophoretic retardation of PNA in the ligation products of chimeras, lanes 5-7, is evident compared to all-DNA ligation. . .

L2 ANSWER 16 OF 45 USPATFULL
DETD . . . the cell membrane. The present strategies for reducing the oligonucleotide charge include: modification of internucleotide linkages by ethylphosphonates, use of **phosphoramidites**, linking **oligonucleotides** to **positively** charged molecules, and creating complex packages composed of oligonucleotides, lipids and specific receptors or effectors for targeted cells. Examples of. . .

L2 ANSWER 17 OF 45 USPATFULL
DETD A comparison with other **positively** charged **oligonucleotides**-ethylmorpholino **phosphoramidate** (Tm/bp=2-3), aminomethyl phosphonate (Tm/bp=2-3) (Letsinger et al., supra), containing positively charged ammonium groups connected via an alkyl linkage (FIG. 1,. . .

L2 ANSWER 18 OF 45 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 1
AB. . . cells. The secretion of IL-6 by osteoblast, which in combination with soluble IL-6 receptor induces conversion of fibroblasts to alkaline **phosphatase-positive** cells, also increased. p50 antisense **oligonucleotide** increased IL-6 mRNA expression. These results suggest that p50 regulates transcription of IL-6 and indirectly controls osteoblast maturation.

L2 ANSWER 19 OF 45 WPIDS (C) 2003 THOMSON DERWENT
AB WO 200036117 A UPAB: 20000807
NOVELTY - Nucleic acids encoding plant CDP (cytosine diphosphate)-alcohol phosphatidyltransferase polypeptide in plants and seeds, are new.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:
(1) an isolated polynucleotide (N1) comprising:
(a) a first nucleotide sequence encoding a polypeptide of at least 50 amino acids that has at least 80 % identity based on the Clustal method of alignment when compared to a polypeptide selected from the 227 (I) or 149 (II) amino acid sequence defined in the specification;
(b) a second nucleotide sequence encoding a polypeptide of at least 100 amino acids that has at least 80 % identity based on the Clustal method of alignment when compared to a 309 (III) amino acid sequence defined in the specification; or
(c) a third nucleotide sequence comprising the complement of (a) or (b);
(2) a polypeptide comprising a first sequence of at least 50 amino acids that has at least 80 % identity based on the Clustal method of alignment when compared to (I) or (II), or a second sequence of at lest 100 amino acids that has at least 80 % identity based on the Clustal method of alignment when compared to (III);
(3) an isolated polynucleotide (N2) comprising:
(a) a first nucleotide sequence encoding a polypeptide of at least 100 amino acids that has at least 80 % identity based on the Clustal method of alignment when compared to a polypeptide selected from the 140 (IV) or 221 (V) amino acid sequence defined in the specification;
(b) a second nucleotide sequence encoding a polypeptide of at least 150 amino acids that has at least 80 % identity based on the Clustal method of alignment when compared to a 208 (VI) amino acid sequence defined in the specification; or
(c) a third nucleotide sequence comprising the complement of (a) or (b);
(4) a polypeptide comprising a first sequence of at least 100 amino acids that has at least 80 % identity based on the Clustal method of alignment when compared to (IV) or (V), or a second sequence of at lest 150 amino acids that has at least 80 % identity based on the Clustal

method of alignment when compared to (VI);

(5) an isolated polynucleotide (N3) comprising:

(a) a first nucleotide sequence encoding a polypeptide of at least 50 amino acids that has at least 90 % identity based on the Clustal method of alignment when compared to a 79 (VII) amino acid sequence defined in the specification;

(b) a second nucleotide sequence encoding a polypeptide of at least 100 amino acids that has at least 80 % identity based on the Clustal method of alignment when compared to a 215 (VIII) amino acid sequence defined in the specification;

(c) a third nucleotide sequence encoding a polypeptide of at least 150 amino acids that has at least 85 % identity based on the Clustal method of alignment when compared to a 227 (IX) amino acid sequence defined in the specification;

(d) a fourth nucleotide sequence encoding a polypeptide of at least 200 amino acids that has at least 80 % identity based on the Clustal method of alignment when compared to a 223 (X) amino acid sequence defined in the specification; or

(e) a fifth nucleotide sequence comprising the complement of (a), (b), (c), (d) or (e);

(6) a polypeptide comprising:

(a) a first sequence of at least 50 amino acids that has at least 90 % identity based on the Clustal method of alignment when compared to (VII);

(b) a second sequence of at least 100 amino acids that has at least 80 % identity based on the Clustal method of alignment when compared to (VIII);

(c) a third sequence of at least 150 amino acids that has at least 85 % identity based on the Clustal method of alignment when compared to (IX);

(d) a fourth sequence of at least 200 amino acids that has at least 80 % identity based on the Clustal method of alignment when compared to (X);

(7) a chimeric gene comprising N1, N2 or N3 operably linked to suitable regulatory sequences;

(8) an isolated host cell comprising the chimeric gene of (7);

(9) a host cell comprising N1, N2 or N3;

(10) a virus comprising N1, N2 or N3;

(11) a method of selecting an isolated polynucleotide that affects the level of expression of a phospholipid biosynthetic enzyme polypeptide in a plant cell, comprising:

(a) constructing N1, N2 or N3, or an isolated polynucleotide comprising a nucleotide sequence of at least one of 30 contiguous nucleotides derived from N1, N2 or N3;

(b) introducing the isolated polynucleotide into a plant cell;

(c) measuring the level of a polypeptide in the plant cell containing the polynucleotide to provide a positive selection means;

(12) a method of obtaining a nucleic acid fragment encoding a phospholipid biosynthetic enzyme, comprising:

(a) synthesizing an oligonucleotide primer comprising a nucleotide sequence of at least one of 30 contiguous nucleotides derived from a sequence (N4) selected from the 950 (XI), 1223 (XII), 705 (XIII), 1109 (XIV), 826 (XV), 1149 (XVI), 1258 (XVII), 1234 (XVIII), 513 (XIX), or 1246 (XX) base pair (bp) sequence (defined in the specification), or the complement of such nucleotide sequences; and

(b) amplifying a nucleic acid sequence using the oligonucleotide primer;

(13) a method of obtaining a nucleic acid fragment encoding a phospholipid biosynthetic enzyme;

(14) a method for evaluating at least one compound for its ability to inhibit the activity of a phospholipid biosynthetic enzyme;

(15) an isolated polynucleotide comprising the nucleotide sequence having at least one of 30 contiguous nucleotides derived from N4, or the

complement of such sequences;
(16) an expression cassette comprising N1, N2 or N3 operably linked to a promoter; and
(17) a method for positive selection of a transformed cell comprising:
(a) transforming a host cell with the chimeric gene of (7) or an expression cassette of (16); and
(b) growing the transformed host cell under conditions which allow expression of the polynucleotide in an amount sufficient to complement a yeast pis or pgs1 mutation to provide a positive selection means.
ACTIVITY - None given.
MECHANISM OF ACTION - CDP-alcohol phosphatidyltransferase.
No biological data given.
USE - The nucleic acid fragments are useful for isolating cDNAs and genes encoding homologous proteins from the same or other plant species.
The nucleic acids and proteins are useful for immunological screening of cDNA expression libraries. The nucleic acids are useful for create transgenic plants in which the polypeptides are present at higher or lower levels than normal or in cell types or developmental stages in which they are not normally found.
Dwg.0/0

L2 ANSWER 20 OF 45 USPATFULL
DETD . . . the cell membrane. The present strategies for reducing the oligonucleotide charge include: modification of internucleotide linkages by methylphosphonates, use of **phosphoramidites**, linking **oligonucleotides** to **positively** charged molecules, and creating complex packages composed of oligonucleotides, lipids and specific receptors or effectors for targeted cells. Examples of. . .

L2 ANSWER 21 OF 45 USPATFULL
DETD . . . shorter oligonucleotide immobilized fractions. The inventors have found that the introduction of base analogs or the substitution of negatively charged **phosphodiester** groups in the immobilized **oligonucleotides** for some neutral or even **positively** charged groups significantly increases duplex stability viz. hairpin stability. For example, substitution of negatively charged phosphate groups for positively charged. . .

L2 ANSWER 22 OF 45 USPATFULL
DETD A comparison with other **positively** charged **oligonucleotides**-ethylmorpholino **phosphoramidate** (Tm/bp=2-3), aminomethyl phosphonate (Tm/bp=2-3) (Letsinger et al., supra), containing positively charged ammonium groups connected via an alkyl linkage (FIG. 1,. . .

L2 ANSWER 23 OF 45 USPATFULL
DETD . . . the cell membrane. The present strategies for reducing the oligonucleotide charge include: modification of internucleotide linkages by ethylphosphonates, use of **phosphoramidites**, linking **oligonucleotides** to **positively** charged molecules, and creating complex packages composed of oligonucleotides, lipids and specific receptors or effectors for targeted cells. Examples of. . .

L2 ANSWER 24 OF 45 USPATFULL
SUMM . . . pgs. 4470-4471 (1988)) describe cationic oligonucleotides in which the backbone is modified by the attachment of diamino compounds to give **positively**-charged **oligonucleotides** with **phosphoramidate** linkages. **Phosphoramidate** linkages, however, are known to be somewhat labile, especially at acidic pH levels, and therefore the cationic group could be. . .

L2 ANSWER 25 OF 45 USPATFULL
DETD . . . the cell membrane. The present strategies for reducing the oligonucleotide charge include: modification of internucleotide linkages by ethylphosphonates, use of **phosphoramidites**, linking **oligonucleotides** to **positively** charged molecules, and creating complex packages composed of oligonucleotides, lipids and specific receptors or effectors for targeted cells. Examples of. . .

L2 ANSWER 26 OF 45 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AB. . . included and activity-decreasing motifs are avoided. This conclusion was made after statistical analysis of data collected from >1000 experiments with **phosphorothioate**-modified **oligonucleotides**. Highly significant **positive** correlation between the presence of motifs CCAC, TCCC, ACTC, GCCA and CTCT in the oligonucleotide and its antisense efficiency was. . .

L2 ANSWER 27 OF 45 USPATFULL
DETD . . . the cell membrane. The present strategies for reducing the oligonucleotide charge include: modification of internucleotide linkages by methylphosphonates, use of **phosphoramidites**, linking **oligonucleotides** to **positively** charged molecules, and creating complex packages composed of oligonucleotides, lipids and specific receptors or effectors for targeted cells. Examples of. . .

L2 ANSWER 28 OF 45 USPATFULL
DETD . . . the cell membrane. The present strategies for reducing the oligonucleotide charge include: modification of internucleotide linkages by methylphosphonates, use of **phosphoramidites**, linking **oligonucleotides** to **positively** charged molecules, and creating complex packages composed of oligonucleotides, lipids and specific receptors or effectors for targeted cells. Examples of. . .

L2 ANSWER 29 OF 45 USPATFULL
DETD . . . the cell membrane. The present strategies for reducing the oligonucleotide charge include: modification of internucleotide linkages by ethylphosphonates, use of **phosphoramidites**, linking **oligonucleotides** to **positively** charged molecules, and creating complex packages composed of oligonucleotides, lipids and specific receptors or effectors for targeted cells. Examples of. . .

L2 ANSWER 30 OF 45 USPATFULL
DETD . . . range of doses. The chimeric oligonucleotides that incorporated the MMI nucleoside units had responses equivalent to or better than the **phosphorothioate oligonucleotide** used as the **positive** control for these tests with **oligonucleotides** having 1 or 2 MMI linkages (oligos 14896, 14897 and 14898) in each of the flank regions showing the greatest. . .

L2 ANSWER 31 OF 45 USPATFULL
DETD . . . shorter oligonucleotide immobilized fractions. The inventors have found that the introduction of base analogs or the substitution of negatively charged **phosphodiester** groups in the immobilized **oligonucleotides** for some neutral or even **positively** charged groups significantly increases duplex stability viz. hairpin stability. For example, substitution of negatively charged phosphate groups for positively charged. . .

L2 ANSWER 32 OF 45 USPATFULL
DETD . . . the cell membrane. The present strategies for reducing the oligonucleotide charge include: modification of internucleotide linkages by ethylphosphonates, use of **phosphoramidites**, linking **oligonucleotides** to **positively** charged molecules, and

creating complex packages composed of oligonucleotides, lipids and specific receptors or effectors for targeted cells. Examples of. . .

L2 ANSWER 33 OF 45 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 2
TI Pharmacokinetics and tolerability of intravenous trecovirsen (GEM(R)91), an antisense **phosphorothioate oligonucleotide**, in HIV-**positive** subjects.

L2 ANSWER 34 OF 45 USPATFULL
DETD . . . the cell membrane. The present strategies for reducing the oligonucleotide charge include: modification of internucleotide linkages by methylphosphonates, use of **phosphoramidites**, linking **oligonucleotides** to **positively** charged molecules, and creating complex packages composed of oligonucleotides, lipids and specific receptors or effectors for targeted cells. Examples of. . .

L2 ANSWER 35 OF 45 USPATFULL
DETD modification of internucleotide linkages by ethylphosphonates, use of **phosphoramidites**, linking **oligonucleotides** to **positively** charged molecules, and creating complex packages composed of oligonucleotides, lipids and specific receptors or effectors for targeted cells. Examples of. . .

L2 ANSWER 36 OF 45 USPATFULL
DETD . . . the cell membrane. The present strategies for reducing the oligonucleotide charge include: modification of internucleotide linkages by methylphosphonates, use of **phosphoramidites**, linking **oligonucleotides** to **positively** charged molecules, and creating complex packages composed of oligonucleotides, lipids and specific receptors or effectors for targeted cells. Examples of. . .

L2 ANSWER 37 OF 45 USPATFULL
DETD . . . the cell membrane. The present strategies for reducing the oligonucleotide charge include: modification of internucleotide linkages by methylphosphonates, use of **phosphoramidites**, linking **oligonucleotides** to **positively** charged molecules, and creating complex packages composed of oligonucleotides, lipids and specific receptors or effectors for targeted cells. Examples of. . .

L2 ANSWER 38 OF 45 USPATFULL
DETD . . . the cell membrane. The present strategies for reducing the oligonucleotide charge include: modification of internucleotide linkages by methylphosphonates, use of **phosphoramidites**, linking **oligonucleotides** to **positively** charged molecules, and creating complex packages composed of oligonucleotides, lipids and specific receptors or effectors for targeted cells. Examples of. . .

L2 ANSWER 39 OF 45 USPATFULL
DETD . . . the cell membrane. The present strategies for reducing the oligonucleotide charge include: modification of internucleotide linkages by methylphosphonates, use of **phosphoramidites**, linking **oligonucleotides** to **positively** charged molecules, and creating complex packages composed of oligonucleotides, lipids and specific receptors or effectors for targeted cells. Examples of. . .

L2 ANSWER 40 OF 45 USPATFULL
DETD . . . the cell membrane. The present strategies for reducing the oligonucleotide charge include: modification of internucleotide linkages by methylphosphonates, use of **phosphoramidites**, linking **oligonucleotides** to **positively** charged molecules, and creating complex packages composed of oligonucleotides, lipids and

specific receptors or effectors for targeted cells. Examples of. . .

L2 ANSWER 41 OF 45 USPATFULL
DETD . . . the cell membrane. The present strategies for reducing the oligonucleotide charge include: modification of internucleotide linkages by ethylphosphonates, use of **phosphoramidites**, linking **oligonucleotides** to **positively** charged molecules, and creating complex packages composed of oligonucleotides, lipids and specific receptors or effectors for targeted cells. Examples of. . .

L2 ANSWER 42 OF 45 USPATFULL
DETD . . . the cell membrane. The present strategies for reducing the oligonucleotide charge include: modification of internucleotide linkages by methylphosphonates, use of **phosphoramidites**, linking **oligonucleotides** to **positively** charged molecules, and creating complex packages composed of oligonucleotides, lipids and specific receptors or effectors for targeted cells. Examples of. . .

L2 ANSWER 43 OF 45 USPATFULL
DETD . . . the cell membrane. The present strategies for reducing the oligonucleotide charge include: modification of internucleotide linkages by methylphosphonates, use of **phosphoramidites**, linking **oligonucleotides** to **positively** charged molecules, and creating complex packages composed of oligonucleotides, lipids and specific receptors or effectors for targeted cells. Examples of. . .

L2 ANSWER 44 OF 45 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AB. . . the eaeA gene, which encodes the expression of the attaching and effacing lesions of Escherichia coli, by using an alkaline **phosphatase** conjugated **oligonucleotide** probe. The strains **positive** for eaeA gene were further assayed for bfpA and slt genes, and also for HEp-2 adhesion and fluorescent actin staining. . .

L2 ANSWER 45 OF 45 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 3
AB. . . patients. Little is known about the mechanism of this inhibition. We studied the inhibition of the bcr-abl oncogene using fluorescein-labeled **phosphorothioate oligonucleotides** in the Philadelphia chromosome-**positive** cell line BV173. **Oligonucleotide** stability, uptake, bcr-abl mRNA degradation, inhibition of cell proliferation, and cell death were studied. The oligonucleotide uptake was directly dependent. . .

09567863

=> d his

(FILE 'HOME' ENTERED AT 15:19:44 ON 21 APR 2003)

FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 15:20:05 ON 21 APR 2003
L1 49 S OLIGONUCLEOTIDE? (6A) POSITIV? (5A) PHOSPH?
L2 45 DUP REM L1 (4 DUPLICATES REMOVED)

=> s l2 and terminal
L3 34 L2 AND TERMINAL

=> s l2 and positiv? (10a) terminal
L4 3 L2 AND POSITIV? (10A) TERMINAL

=> d l4 bib abs kwic 1-3

L4 ANSWER 1 OF 3 USPATFULL
AN 2003:106233 USPATFULL
TI Compositions and methods for the therapy and diagnosis of pancreatic cancer
IN Benson, Darin R., Seattle, WA, UNITED STATES
Kalos, Michael D., Seattle, WA, UNITED STATES
Lodes, Michael J., Seattle, WA, UNITED STATES
Persing, David H., Redmond, WA, UNITED STATES
Hepler, William T., Seattle, WA, UNITED STATES
Jiang, Yuqiu, Kent, WA, UNITED STATES
PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)
PI US 2003073144 A1 20030417
AI US 2002-60036 A1 20020130 (10)
PRAI US 2001-333626P 20011127 (60)
US 2001-305484P 20010712 (60)
US 2001-265305P 20010130 (60)
US 2001-267568P 20010209 (60)
US 2001-313999P 20010820 (60)
US 2001-291631P 20010516 (60)
US 2001-287112P 20010428 (60)
US 2001-278651P 20010321 (60)
US 2001-265682P 20010131 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
CLMN Number of Claims: 17
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 14253
AB Compositions and methods for the therapy and diagnosis of cancer, particularly pancreatic cancer, are disclosed. Illustrative compositions comprise one or more pancreatic tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly pancreatic cancer.

SUMM [2043] SEQ ID NO:2003 is the determined cDNA sequence of clone 61496359

L4 ANSWER 2 OF 3 USPATFULL
AN 2002:272801 USPATFULL

09567863

TI Compositions and methods for the therapy and diagnosis of colon cancer
IN Stolk, John A., Bothell, WA, UNITED STATES
Xu, Jiangchun, Bellevue, WA, UNITED STATES
Chenault, Ruth A., Seattle, WA, UNITED STATES
Meagher, Madeleine Joy, Seattle, WA, UNITED STATES
PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)
PI US 2002150922 A1 20021017
AI US 2001-998598 A1 20011116 (9)
PRAI US 2001-304037P 20010710 (60)
US 2001-279670P 20010328 (60)
US 2001-267011P 20010206 (60)
US 2000-252222P 20001120 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
CLMN Number of Claims: 17
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 9233
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compositions and methods for the therapy and diagnosis of cancer, particularly colon cancer, are disclosed. Illustrative compositions comprise one or more colon tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly colon cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
SUMM [2044] SEQ ID NO:1997 is the determined cDNA sequence for clone 62227174 R0394:B12

L4 ANSWER 3 OF 3 USPATFULL
AN 2002:243051 USPATFULL
TI Compositions and methods for the therapy and diagnosis of ovarian cancer
IN Algate, Paul A., Issaquah, WA, UNITED STATES
Jones, Robert, Seattle, WA, UNITED STATES
Harlocker, Susan L., Seattle, WA, UNITED STATES
PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)
PI US 2002132237 A1 20020919
AI US 2001-867701 A1 20010529 (9)
PRAI US 2000-207484P 20000526 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
CLMN Number of Claims: 11
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 25718
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compositions and methods for the therapy and diagnosis of cancer, particularly ovarian cancer, are disclosed. Illustrative compositions comprise one or more ovarian tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly ovarian cancer.

09567863

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
SUMM [2043] SEQ ID NO: 2004 represents the cDNA sequence for clone AA165409.

=>